

REMARKS

This is the second Office Action in the prosecution of this application.

A Restriction Requirement was made in a paper mailed 21 November 2003 to which Applicants replied by: a) electing claims 15-21 in a paper mailed 19 December 2003; and b) filing a Divisional Application on 30 January 2004. The latter application pends.

The Office Action mailed 01 March 2004 withdraws the Restriction Requirement. Applicants have amended claims 1 and 15, the base claims for both groups identified in the aforementioned restriction requirement, and submit that the amendments place both groups of claims in condition for allowance.

Claims 1-10 and 13 have been rejected under 35 USC §102(e) as being anticipated by Hamada et al., U.S. Patent No. 6,580,601. Hamada solves a problem identified at col. 2, lines 16-24, viz. the poor adhesion and poor conductivity between the carbon of a cathode layer of a capacitor and an Ag paste used to connect the cathode layer to a cathode lead. The solution disclosed and claimed by Hamada et al. is to add a layer of a foam containing conductive metal particles which foam is "filled" with a conductive polymer.

Applicants are focused on solving issues at a different interface, viz. the connection between a layer of intrinsically conductive polymer that forms the first cathodic layer, and the carbon layer used to minimize thermo-mechanical stress during handling.

This application and the cited reference address different parts of the finished capacitor. Hamada et al. employs an additional layer- the foamed paste- not part of Applicants' claims. The foamed paste is not a non-functional component of the Hamada et al. device as witnessed by the extensive description beginning at col. 4, line 22, through col. 5, line 20. Applicants' apparatus claims, presented in closed format, do not allow for additional components which have functionality.

The Examiners' attention is directed to the distinction between "open" or "comprising" claims and "closed" claim language such as "consisting essentially of." The phrase "consisting essentially of" reads on not only the recited ingredients but also minor amounts of materials

which do not affect the properties of the claimed composition or apparatus. Atlas Powder Co. v. E.I. duPont de Nemours & Co, 224 USPq409, 411 (CAFC 1984).

Applicants' method claims, claims 13-21, likewise allow for no additional functional method steps and are free of the prior art.

Claim 11 had been rejected as obvious under 35USC §103(a) over Hamada et al. in view of Sakai, U.S. Patent No. 6,430,032. Sakai is cited for teaching that a poly (3,4-ethylenedioxthiophene) is a useful conducting polymer. The recited polymer is a preferred embodiment but the claim does not rely on uniqueness of this compound for patentability.

Claim 14 had been rejected under 35 USC §103(a) over Hamada et al. in view of Ariano et al., U.S. Patent No. 5,586,001 which teaches epoxy resins for encapsulation of finished capacitors. The finished capacitor is different from Hamada et al.

The method claims 12, 15-17 and 19-21 had been rejected under 35 USC §103(a) over Hamada et al. in view of Reed et al., U.S. Patent No. 6,304,427. As noted *supra*, the steps of Hamada et al. include steps to effect the formation of a conductive paste layer, not part of Applicants' method.

Claim 18 had been rejected under 25 USC §103(a) over Hamada et al., Reed et al., and Sakai et al. The same arguments apply.

Applicants are filing, with this response, a Declaration Under 37 CFR §1.132 by Erik Reed, Ph.D., a colleague of the inventors, attesting to the improved properties of the carbon-first conductive layer interface to which this application is addressed. Particular attention is directed to the mode of failure demonstrated in each test sequence and especially to Dr. Reed's conclusions at item 12, page 3, of the Declaration.

In view of the amendments to the claim, the included arguments and the Reed Declaration, Applicants submit that this application is in condition for allowance and request reconsideration and passage to issue.